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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,614	11/10/2003	James F. Hainfeld	16049Z	4692
23389 7590 10/16/2008 SCULLY SCOTT MURPHY & PRESSER, PC 400 GARDEN CITY PLAZA SUITE 300 GARDEN CITY, NY 11530				
EXAMINER HOPKINS, CHRISTINE D				
ART UNIT		PAPER NUMBER		
3735				
MAIL DATE		DELIVERY MODE		
10/16/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/705,614

**Applicant(s)**

HAINFELD ET AL.

**Examiner**

CHRISTINE D. HOPKINS

**Art Unit**

3735

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 September 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22, 25, 69 and 71-89 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 2 is/are allowed.  
6) ☒ Claim(s) 1, 3-22, 25, 69 and 71-89 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/888)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. This Office Action is responsive to the Amendment filed 2 September 2008. Claims 1-22, 25, 69 and 71-89 are now pending.

#### ***Double Patenting***

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 3-22, 25, 69, 71-87 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-21 of U.S. Patent No. 7,367,934. Although the conflicting claims are not identical, they are not patentably distinct from each other. Claim 1 of the patent teaches a method for

enhancing the effects of radiation directed to a tissue of an animal comprising irradiating the animal with radiation in the form of x-rays at a particular energy. Claim 1 of the instant invention simply teaches a method for enhancing the effects of radiation directed to a tissue of an animal comprising irradiating the animal with radiation, wherein the radiation may consist of x-rays. Claim 1 of the patent also conflicts with claim 69 of the instant invention because claim 69 simply teaches a method for enhancing the effects of radiation directed to a tissue of an animal comprising irradiating the animal with radiation.

4. Claims 88 and 89 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 40 and 46, respectively, of U.S. Patent No. 6,955,639. Although the conflicting claims are not identical, they are not patentably distinct from each other. Claim 40 of the patent teaches a method of enhancing the effects of radiation directed towards a tissue in an animal comprising administering an amount of metal nanoparticles to the animal wherein the size of the metal core of the nanoparticle is in a specific range and the nanoparticles comprise a surface layer material of thioglucose. Claim 88 of the instant invention simply teaches a method of enhancing the effects of radiation directed towards a tissue in an animal comprising administering an amount of metal nanoparticles to the animal wherein the nanoparticles comprise a surface layer material of thioglucose.

Claim 46 of the patent conflicts with claim 89 of the instant invention. Claim 46 of the patent teaches a method of enhancing the effects of radiation directed towards a tissue in an animal comprising administering an amount of metal nanoparticles to the

animal wherein the size of the metal core of the nanoparticle is in a specific range, wherein the nanoparticles are polyanions of metals complexed with quaternary ammonium salts. Claim 89 of the instant invention simply teaches a method of enhancing the effects of radiation directed towards a tissue in an animal comprising administering an amount of metal nanoparticles to the animal, wherein the nanoparticles are polyanions of metals complexed with quaternary ammonium salts.

#### ***Allowable Subject Matter***

5. Claim 2 is allowable over the prior art of record. Regarding claim 2, the prior art of record does not teach or fairly suggest a method of ablating a tissue in an animal comprising administering an amount of metal nanoparticles to said animal and subsequently irradiating the animal with radiation wherein the radiation is in a form selected from the group consisting of x-rays, microbeam arrays of x-rays, radioisotopes, electrons, protons, ion means, and neutrons wherein the metal nanoparticles are administered in an amount to achieve a concentration in the animal of at least about 0.1% metal by weight.

#### ***Response to Arguments***

6. Applicant's arguments filed 2 September 2008 with respect to the rejection of claims 69, 71-81 and 83-87 under 35 U.S.C. 103(a) citing Esenaliev ('440) in view of Patel (U.S. Pub. No. 2005/0180917) have been fully considered but are moot in view of the new grounds of double patenting rejections presented above.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE D. HOPKINS whose telephone number is (571)272-9058. The examiner can normally be reached on Monday-Friday, 7 a.m.-3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor, II can be reached on (571) 272-4730. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. D. H./  
Christine D Hopkins  
Examiner  
Art Unit 3735

/Charles A. Marmor, II/  
Supervisory Patent Examiner  
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